i. Proposal number.# 2001-F213*

ii. Short proposal title .# San Joaquin River Dissolved Oxygen Depletion Next Phase Funding*

APPLICABILITY TO CALFED ERP GOALS AND IMPLEMENTATION PLAN
1a1. Link to ERP Strategic Goals: What Strategic Goal(s) is /are addressed by this proposal? List the letter(s) of all that apply.

A. At-risk species
B. Rehabilitate natural processes
C. Maintain harvested species
D. Protect-restore functional habitats
E. Prevent non-native species and reduce impacts
F. Improve and maintain water quality# A and F*

1a2. Describe the degree to which the proposal will contribute to the relevant goal. Quantify your assessment and identify the contribution to ERP targets, when possible.# A. This proposal targets remediation of a longstanding seasonal deficit of dissolved oxygen in the San Joaquin River. According to DFG reports dating back to the 1970s, low dissolved oxygen in this area may be responsible for blocking migration of fall-run salmon in the southern Central Valley rivers. Therefore, this project to identify causes of low dissolved oxygen is the first step in correction of the problem. This proposal also tests some remediation activity for efficacy during the next couple of years.

F. Low dissolved oxygen conditions have been prevalent in the San Joaquin River for decades. This is the first serious attempt to correct the problem at its source. Proper identification of sources and attempts at correction will lead to a solid corrective action plan that can be implemented by all responsible parties. The proposal is also backed by a large stakeholder group which will retain the practical utility of the findings.*

1b. Objectives: What Strategic Objective(s) is/are addressed by this proposal? List Objective (from the table of 32 objectives) and describe potential contribution to ERP Goals. Quantify your assessment, when possible.#Goal 1, Objective 1. This objective is to aid recovery of listed species. The dissolved oxygen block prevents the fall run salmon from easily reproducing in the San Joaquin Tributaries. This is a fundamental corrective action measure for the river and the salmon.

Goal 6, Objective 2. Objective 2 was written specifically for the conditions that are present in the San Joaquin River. This proposal is part of the fundamental work necessary for correction. Correction of this problem is a fundamental effort for restoration of chinook salmon on San Joaquin Tributaries.*

1c. Restoration Actions: Does the proposal address a Restoration Action identified in Section 3.5 of the PSP? Identify the action and describe how

well the proposed action relates to the identified Restoration Action.# Contaminants in the Central Valley. The dissolved oxygen section was written specifically for the conditions in the San Joaquin River. This proposal is part of the fundamental work necessary for correction. Correction of this problem is a fundamental effort for restoration of chinook salmon on San Joaquin Tributaries.*

1d. Stage 1 Actions: Is the proposal linked directly, indirectly or not linked to proposed Stage 1 Actions? If linked, describe how the proposal will contribute to ERP actions during Stage 1.# This project is linked to the stage 1 actions of the Eco Water Quality program, a part of the ERP. Again this is a fundamental action. Part 1 of this study has already been funded and the need for further work is very clear. Preliminary remedial work proposed will provide some information to help dischargers to meet discharge reductions that will eventually be imposed (about the time the study is finished). A study of the causes and remedial work implementation is the goal of the stage 1 actions in Low DO.*

1e. MSCS: Describe how the proposal is linked to the Multi-Species Conservation Strategy and if it's consistent with the MSCS Conservation measures. Identify the species addressed and whether the proposal will "recover", "contribute to recovery" or "maintain" each species.# This action would contribute to recovery of fall-run chinook salmon by eliminating a barrier to up-stream migration and spawning. While this measure would not eliminate the oxygen sag, it is a necessary first step to the solution.*

1f. Information Richness/Adaptive Probing related to the proposal: Describe the degree to which the proposal provides information to resolve one of the 12 scientific uncertainties (Section 3.3 of the PSP), and whether the proposal offers a prudent approach to answer these uncertainties.# This study will quantify how agricultural land, in addition to other land uses, influences the San Joaquin River dissolved oxygen, which is critical for ecological health. This is the only prudent way to go. This proposal, the second phase in a multi phase study, has already shown adaptive management by reassessing preliminary data on causes and shifting the focus of the first phase and subsequent phases. The process is driven in part by technical representatives from stakeholder interests and agencies. The process therefore has good peer review during development.*

1g. Summarize comments from section 1a through 1f related to applicability to CALFED goals and priorities. Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.# The strength is that this is a necessary part of the strategy for correcting the dissolved oxygen problems in the SJR. It is the second phase of the project. It is critical for eliminating a migration block for salmon. There is no other method for doing this.

The sole weakness is the many spread out research studies that would need to be integrated for a coherent report. It would be prudent for the stakeholder technical committee to watch closely over the content of ther report and how well it is tied together.*

APPLICABILITY TO CVPIA PRIORITIES

1i. Describe the expected contribution to natural production of anadromous fish. Specifically identify the species and races of anadromous fish that are expected to benefit from the project, the expected magnitude of the contribution to natural production for each species and race of anadromous fish, the certainty of the expected benefits, and the immediacy and duration of the expected contribution. Provide quantitative support where available (for example, expected increases in population indices, cohort replacement rates, or reductions in mortality rates).# Project would benefit fall run chinook salmon by furthering Action 5 for the mainstem San Joaquin River, a high priority action in the 1997 Revised Draft Restoration Plan for the Anadromous Fish Restoration Program (AFRP) . Expected magnitude of benefit is unknown and difficult to quantify, but could be appreciable if it leads to successful implementation of "an adaptive management action plan" that increases dissolved oxygen in the ship channel to levels that meet or exceed basin plan objectives. The immediacy of benefits would depend on the findings of the study and the remedial actions it recommends. If based primarily on the provision of dilution flows or on artificial oxygenation, for example, benefits of recommended actions could be almost immediate. By contrast, if the recommended strategy ends up relying primarily on reduction of non-point source loading of oxygen-demanding material from upstream, expected benefits might not be appreciable for 5 years or more. The duration of benefits would similarly be a function of the study's findings and recommendations and on whether or how successfully they were implemented.*

1j. List the threatened or endangered species that are expected to benefit from the project. Specifically identify the status of the species and races of anadromous fish that are expected to benefit from the project, any other special-status species that are expected to benefit, and the ecological community or multiple-species benefits that are expected to occur as a result of implementing the project.# The project would benefit fall run chinook salmon (candidate) and possibly Delta smelt (threatened). By improving water quality conditions in the ship channel specifically and the Southern Delta generally, the project would have multiple species benefits.*

1k. Identify if and describe how the project protects and restores natural channel and riparian habitat values. Specifically address whether the project protects and restores natural channel and riparian habitat values, whether the project promotes natural processes, and the immediacy and duration of benefits to natural channel and riparian habitat values.# The project would further understanding of natural processes in the San Joaquin River and would evaluate the extent to which restoration of natural channel or riparian (wetland) habitat might contribute to improved dissolved oxygen (DO) conditions in the ship channel. Also, by providing the scientific basis for improving DO, the project would further efforts to encourage a greater variety of natural processes in the ship channel (e.g., increased abundance or diversity of benthic organisms).*

1l. Identify if and how the project contributes to efforts to modify CVP operations. Identify the effort(s) to modify CVP operations to which the proposed project would contribute, if applicable. Efforts to modify CVP operations include modifications to provide flows of suitable quality,

quantity, and timing to protect all life stages of anadromous fish as directed by Section 3406 (b)(1)(B) of the CVPIA, including flows provided through management of water dedicated under Section 3406(b)(2) and water acquired pursuant to Section 3406(b)(3).# The project could lead to modifications of b(2) releases or b(3) purchases in the San Joaquin basin as part of any effort to dilute loading of oxygen demanding material to the ship channel or to decrease hydraulic residence time or water temperature in the ship channel. The project could also provide information useful to the Department of the Interior in its efforts to implement sections 3405(c), 3406(c) and 3408(h) of the CVPIA.*

1m. Identify if and how the project contributes to implementation of the supporting measures in the CVPIA. Identify the supporting measure(s) to which the proposed project would contribute, if applicable. Supporting measures include the Water Acquisition Program, the Comprehensive Assessment and Monitoring Program, the Anadromous Fish Screen Program, and others.# Project might lead to purchase of dilution water under the Water Acquisition Program and could lead to riparian wetland restoration or other actions in the San Joaquin basin that would contribute to "b(1) other" efforts.*

1n. Summarize comments from section 1i through 1m related to applicability to CVPIA priorities (if applicable, identify the CVPIA program appropriate to consider as the source of CVPIA funding [for example, the Anadromous Fish Restoration Program, Habitat Restoration Program, Water Acquisition Program, Tracy Pumping Plant Mitigation Program, Clear Creek Restoration Program, Comprehensive Assessment and Monitoring Program, and Anadromous Fish Screen Program]). Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.# This project continues studies intended to provide the scientific basis for a plan that will define what actions must be taken to increase DO in the San Joaquin ship channel. It therefore contributes to efforts to remove a possible DO barrier to chinook salmon migration and to improve water quality conditions for the ecosystem as a whole. The project could lead to modifications of b(2) releases or b(3) purchases in the San Joaquin basin as part of any effort to dilute loading of oxygen demanding material to the ship channel or to decrease hydraulic residence time or water temperature in the ship channel. The project could also provide information useful to the Department of the Interior in its efforts to implement sections 3405(c), 3406(c) and 3408(h) of the CVPIA. This project helps implement a high priority action item in the AFRP Revised Draft Restoration Plan (Action 5) and would therefore qualify for funding consideration under the Anadromous Fish Restoration Program. *

RELATIONSHIP TO OTHER ECOSYSTEM RESTORATION PROJECTS

2a. Did the applicant explain how the proposed project relates to other past and future ecosystem restoration projects, as required on page 57 in the PSP? Type in yes or no.#yes*

2b. Based on the information presented in the proposal and on other information on restoration projects available to CALFED and CVPIA staff, describe how the proposed project complements other ecosystem restoration projects, including CALFED and CVPIA. Identify projects or types of

projects that the proposed project would complement, now or in the future.
Identify source of information.#Development of methods to increase dissolved oxygen are critical to several restoration projects upstream of the DO depression -in Stanislaus, Calaveras, Merced, and Tuolumne Rivers projects designed to improve salmon migration and spawning habitat. This is second year funding for the work. Will collaborate or integrate with other San Joaquin River projects to avoid duplication of effort, including a tagging study of fish migration past the low DO concentration, DOC studies as part of 99B06, and real-time water quality projects on the San Joaquin River and Grasslands areas.
Information source: Proposal*

RESULTS AND PROGRESS ON PREVIOUSLY FUNDED CALFED AND CVPIA PROJECTS, INCLUDING REQUESTS FOR NEXT-PHASE FUNDING
3a1. Based on the information presented in the proposal and on project reports and data available to CALFED and CVPIA staff, has the applicant previously received CALFED or CVPIA funding? Type CALFED, CVPIA, both, or none .#CALFED*

3a2. If the answer is yes, list the project number(s), project name(s) and whether CALFED or CVPIA funding. If the answer is none, move on to item 4.#
99B16 - Dissolved Oxygen in the San Joaquin River*

3b1. Based on the information presented in the proposal and on project reports available to CALFED and CVPIA staff, did the applicant accurately state the current status of the project(s) and the progress and accomplishments of the project(s) to date? Type yes or no.#yes*

3b2. If the answer is no, identify the inaccuracies:#

3c1. Has the progress to date been satisfactory? Type yes or no.#yes*

3c2. Please provide detailed comments in support of your answer, including source of information (proposal or other source):#Most DWR projects are underway and progressing. Project initially delayed due to contracting issues. Project is on track and making significant progress
Information source: CALFED tracking table, personal experience on contracting issues, CALFED progress reports.*

REQUESTS FOR NEXT-PHASE FUNDING
3d1. Is the applicant requesting next-phase funding? Type yes or no.#yes*

3d2. If the answer is yes, list previous-phase project number(s) here. If the answer is no, move on to item 4.#99B16*

3e1. Does the proposal contain a 2-page summary, as required on pages 57 and 58 of the PSP? Type yes or no.#yes*

3e2. Based on the information presented in the summary and on project reports available to CALFED and CVPIA staff, is the project ready for next-phase funding? Type yes or no.#yes*

3e3. Please provide detailed comments in support of your answers, including source of information (proposal or other source):#Although contract for year one Phase was not completed until May, initial work is ongoing and on schedule. Given that they will need to continue with the project for the full three years, they should be ready for second year funding by early 2001. Information source: Proposal*

LOCAL INVOLVEMENT

4a. Does the proposal describe a plan for public outreach, as required on page 61 of the PSP? Type yes or no.# Yes.*

4b. Based on the information in the proposal, highlight outstanding issues related to support or opposition for the project by local entities including watershed groups and local governments, and the expected magnitude of any potential third-party impacts.# The proposed project enjoys local support, no apparent opposition, and would have no direct third party impacts.*

ENVIRONMENTAL COMPLIANCE

4d. List any potential environmental compliance or access issues as identified in the PSP checklists.# None*

4e. Specifically highlight and comment on any regulatory issues listed above that may prevent the project from meeting the projected timeline.#None*

COST

5a. Does the proposal include a detailed budget for each year of requested support? Type yes or no.# Yes, for year 2001*

5b. Does the proposal include a detailed budget for each task identified? Type yes or no.# Yes*

5c. Is the overhead clearly identified? Type yes or no.# Yes*

5d. Are project management costs clearly identified? Type yes or no.# Yes*

5e. Please provide detailed comments in support of your answers to questions 5a - 5d.# All information requested has been provided by project proponent in a clear, concise, and understandable format*

COST SHARING
6a. Does the proposal contain cost-sharing? Type yes or no.# Yes*

6b. Are applicants specifically requesting either state or federal cost share dollars? Type state, federal, or doesn't matter.# Doesn't matter*

6c. List cost share given in proposal and note whether listed cost share is identified (in hand) or proposed.

6c1. In-kind:#n/a*

6c2. Matching funds:# n/a*

6c3. Show percentage that cost sharing is of total amount of funding requested along with calculation.# City of Stockton: 50,000 dollars; Deltakeeper: 4,200 dollars; RWQCB: 15,000 dollars; City of Modesto: 12,000 dollars. Total:93,200 or 3.27% of total funding requested*

6d. Please provide detailed comments in support of your answers to questions 6a - 6c3.# All information requested has been provided by project proponent in a clear, concise, and understandable format*